

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1.-26. (Cancelled).

27. **(Currently Amended)** A computer network for generating instructions for use by photomask manufacturing equipment, comprising:

a computer accessible to a remote customer computer via a remote network connection, and during the network connection, the computer operable to receive photomask specification data and design data from the remote customer computer;

a database in communication with the computer, operable to store the photomask specification data and the design data;

a command generator in communication with the photomask specification database, the command generator operable to generate fracturing instructions and control instructions based on the photomask specification data; and

a fracture engine that uses the fracturing instructions and the design data to generate fractured pattern data.

28. **(Currently Amended)** The network of Claim 27, further comprising the computer operable to receive the design data from the remote customer computer in an electronic [[form]] format.

29. **(Previously Presented)** The network of Claim 28, further comprising the computer operable to receive the design data and the photomask specification data during a single network connection.

30. **(Currently Amended)** The network of Claim 27, further comprising the command generator operable to deliver the control instructions to a data storage device accessible by the photomask manufacturing equipment.

31. **(Currently Amended)** The network of Claim 27, further comprising the fracture engine operable to deliver the fractured pattern data to a data storage device accessible by the photomask manufacturing equipment.

32. **(Previously Presented)** The network of Claim 27, wherein the database comprises:
a specification database operable to store the photomask specification data;
and
a customer design database operable to store the design data.

33. **(Previously Presented)** The network of Claim 27, wherein the computer network comprises a local area network that includes the computer and the database.

34. **(Previously Presented)** The network of Claim 27, wherein the computer receives the photomask specification data and the design data from the customer computer via an internet connection.

35. **(Currently Amended)** A method for generating instructions for use by photomask manufacturing equipment, comprising:
providing a network connection between a computer and a remote customer computer;
receiving, at the computer, photomask specification data and design data from the remote customer computer via the network connection;
storing the photomask specification data and design data in a database;

generating fracturing instructions and control instructions based on the photomask specification data using a command generator in communication with the database; and

generating fractured pattern data from the fracturing ~~instruction~~ instructions and design data using a fracture engine.

36. (Currently Amended) The method of Claim 35, further comprising receiving the design data from the remote customer computer in electronic form.

37. (Previously Presented) The method of Claim 35, further comprising receiving the design data and the photomask specification data during a single network connection.

38. (Currently Amended) The method of Claim 35, further comprising delivering the control instructions to a data storage device accessible by the photomask manufacturing equipment.

39. (Currently Amended) The method of Claim 35, further comprising delivering the fractured pattern data to a data storage device accessible by the photomask manufacturing equipment.

40. (Previously Presented) The method of Claim 35, wherein the database comprises:
a specification database operable to store the photomask specification data;
and
a customer design database operable to store the design data.

41. (Previously Presented) The method of Claim 35, wherein the network connection comprises an internet connection.

42. (Previously Presented) A method for automatically generating instructions for use by photomask manufacturing equipment, comprising:

receiving photomask specification data in an electronic format from a customer computer; and

in response to receiving the photomask specification data from the customer computer, automatically performing operations including:

storing the photomask specification data;

generating fracture instructions;

generating equipment instructions from the fracture instructions; and

electronically transmitting the equipment instructions to photomask manufacturing equipment.

43. (Previously Presented) The method of Claim 42, further comprising receiving pattern design data from a customer computer.

44. (Previously Presented) The method of Claim 43, wherein the pattern design data comprises customer circuit design data.

45. (Currently Amended) The method of Claim ~~[[42]]~~ 43, wherein the operation of receiving pattern design data comprises receiving the pattern design data from the customer computer via file transfer protocol (FTP).

46. (Currently Amended) The method of Claim 42, wherein the operation of generating ~~fractured pattern data~~ fracture instructions comprises using a fracture engine to generate fractured pattern data based on the fracture instructions.

47. (Previously Presented) The method of Claim 46, further comprising receiving the pattern design data at the fracture engine for use in generating the fractured pattern data.

48. (Previously Presented) The method of Claim 42, further comprising generating control instructions based on the photomask specification data, wherein the control instructions specify where and how patterns are to be written on a photomask.

49. (Previously Presented) The method of Claim 42, wherein the equipment instructions comprise fractured pattern data and control instructions.

50. (Previously Presented) The method of Claim 42, wherein the equipment instructions comprise data to be used by the photomask manufacturing equipment to produce a photomask for each layer of an integrated circuit.

51. (Previously Presented) The method of Claim 42, wherein the operation of electronically transmitting the equipment instructions to the photomask manufacturing equipment comprises electronically transmitting the equipment instructions to photomask writing tools.

52 (Previously Presented) The method of Claim 42, wherein the manufacturing equipment comprises computer-controlled lithography equipment.

53. (Previously Presented) A method for generating instructions for use by photomask writing tools comprising:

receiving, at a computer, photomask specification data in an electronic format from a customer computer; and

in response to receiving the photomask specification data, automatically performing operations comprising:

storing the photomask specification data in a database; and

generating a job deck for photomask writing tools based on the photomask specification data.